

ACCESSION NR. AP4034552

extracts was determined by irradiation of the samples with protons and measuring the radioactivity of the irradiated samples. The results confirmed the inclusion of water oxygen in the neoxanthin molecule under illumination. The exchange with the epoxy group was considered as most probable. A schematic presentation of the probable transformation of carotenoids in the processes of photosynthesis is given.  
Orig. art. has: 2 figures.

ASSOCIATION: Botanicheskiy institut im. V. L. Komarova, Akademii nauk SSSR (Institute of Botany, Academy of Sciences SSSR)

SUBMITTED: 08Jul63

DATE ACQ: 13May64

ENCL: 00

SUB CODE: CH

NO REF Sov: 012

OTHERS: 008

Cord 2/2

SAAKOV, V.S.; SAIDOV, A.S.

Some methodological problems of producing highly active xanthophyll  
preparations. Uzb. biol. zhur. 9 no.4:5-9 '65.

(MIRA 18:10)

1. Botanicheskiy institut im. V.L.Komarova AN SSSR i Samarkandskiy  
gosudarstvennyy universitet.

SAAKOV, V.S.

Effect of boron and manganese on the dynamics of translocation and distribution of C<sup>14</sup>-glucose in plants. Dokl. AN SSSR 162 no. 2; 465-467 My '65. (MIRA 18:5)

1. Submitted October 14, 1964.

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001446610011-7

САРАНСК, Р.С.

Metabolism of viciaxanthin-C<sub>14</sub> in a leaf and its role in photosynthetic reactions. Dokl. AN SSSR 165 no.1:230-233 N '65.

1. Botanicheskiy institut im. V.I.Komarova AN SSSR. Submitted  
December 14, 1964. (MIRA 18:10)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001446610011-7"

SAAKOV, V.S.

Possible role of carotenoids in the mechanism of oxygen transfer during photosynthesis. Fiziol. rast. 12 no.3:377-385  
My-Je '65. (MIRA 18:10)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR,  
Leningrad.

ACC NR: AP5027847

SOLID DD

(A)

SOURCE CODE: UR/0020/65/165/001/0230/0233

31

B

AUTHOR: Saakov, V. S.

ORG: Botanical Institute im. V. L. Komarov, Academy of Sciences SSSR (Botanicheskiy  
institut Akademii nauk SSSR)TITLE: Metabolism of C<sub>14</sub>-violaxanthine in leaves and its role in photosynthetic  
reactions ✓

SOURCE: AN SSSR. Doklady, v. 165, no. 1, 1965, 230-233

TOPIC TAGS: biochemistry, biosynthesis, photosynthesis, plant chemistry, pigment, lamp,  
3N-8 lamp

ABSTRACT: Photosynthetic metabolism of C<sub>14</sub>-violaxanthine (I) in leaves of hydrangea, black currant, and water thyme was studied. The work was undertaken in order to test in vivo the ability of xanthophile molecules to be converted from one form of the pigment into another when subjected to light, as previously shown in vitro by V. S. Saakov (Bot. zhurn., 48, No. 6, 888, 1963). The foliage was infiltrated by a colloidal solution of I in methanol in the presence of light and in the dark. The leaves were irradiated in the aqueous medium with 3N-8 lamps for 2 hours, the pigments extracted, and then chromatographed. The fractions containing carotene, neoxanthine, and lutein were analyzed for C<sub>14</sub> content. It was established that during the

UDC: 541.144.7+581.132

Card 1/2

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001446610011-7

KERBALIYEV, A.I., inzh.; GRINBERG, B.I., inzh.; SAAKOV, Yu.M., inzh.

Automation and central control in plants manufacturing precast  
reinforced concrete. Mekh. stroi. 18 no.10:24-27 0 '61. (MIRA 14:11)  
(Concrete plants) (Automatic control)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001446610011-7"

21922. SAAKOVA, L. I.

Materialy k izucheniiyu produktivnosti imeretinskoy obtsy. Trudy Zool. in-ta  
(Akad. nauk Gruz. SSR), t. VIII, 1949, s. 341-71. - Na gruz. YAZ.- Rezyume  
na rus. yaz. - Bibliogr:s. 369-71.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949.

USSR/Farm Animals - Large Horned Cattle.

Q-2

Abs Jour : Ref Zhur - Biol., No 18, 1958, 83348

Author : Saakova, L.I.

Inst : Georgian Scientific Research Institute of Veterinary Medicine.

Title : The Ingestion of Green Fodder by Georgian Mountain Cattle Cows and by Swiss Breed Hybrids.

Orig Pub : Byul. nauchno-tekhn. inform. Gruz. n.-i. in-ta zhivotno-vodstva i vet., 1957, No 2, 12-14.

Abstract : Tests were performed at 2 kolkhozes in order to investigate ingestion of green fodder by local mountain cattle cows as well as by improved and crossbred Swiss breed cows. It was established that ingested fodder amounts depend upon the live weight of cows and upon the water content of ingested grass. The correlation coefficient of live weight

Card 1/2

ZABRODSKIY, A.G.; DANILENKO, P.L.; CHESTNOV, P.G.; SAAKOVA, N.G.

Processing of the grains of the "Krasnoe Kubanskoe" variety of  
sorghum for alcohol manufacture. Trudy UkrNIISP no.5:71-75 '59.  
(MIRA 16:11)

KOROVIN, S.S.; IVANOVA, R.V.; SAAKOVA, O.V.; BOL'SHAKOV, K.A.

Extraction of gallium from the sulfuric acid solutions by butyl acetate. Zhur. prikl. khim. 34 no.5:1007-1012 My '61.

I. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. Lomonosova. (MIRA 16:8)

(Gallium) (Sulfuric acid)  
(Acetic acid)

GINETSINSKAYA, T. I. : SHAFROVA, YE. O.

Trematoda

Paths of migration of trematodes of the Cyclocoelidae Koss. Family in the organism  
of the final host. Dokl. AN SSSR 85 No. 6, 1952

9. Monthly List of Russian Accessions, Library of Congress, December 1957? Uncl.

PHASE I BOOK EXPLOITATION 763

Saakyan, A. and Kurbanov, L.

Kratkiy ocherk ekonomicheskogo razvitiya Turkmenskoy SSR (Brief Outline of the Economic Development of the Turkmen SSR) Ashkhabad, Turkmengosizdat, 1957. 193 p. 4,000 copies printed.

Ed.: Zotov, D.A.; Tech. Ed.: Volyanskaya, O.A.

PURPOSE: This is an economic survey of Turkmen industries intended for the general reader.

COVERAGE: The book covers the field of Turkmen industrial history from imperial times to 1956. The introduction surveys the main present-day economic problems faced by this Republic and evaluates the position of Turkmenia within the Union. Individual chapters deal chronologically with the growth of Turkmen industrial potential. The book contains figures and data on various aspects of the Turkmen national economy. In the text, there are 45 Soviet references, 50 tables, and 11 illustrations.

Card 1/2

## 'Brief Outline of the Economic Development (Cont.)

763

## Introduction

Ch. I. Cultural and Economic Conditions in Turkmenistan Before the Revolution	5
Ch. II. Economic Development of Turkmenistan Before the First Five Year Plan	15
Ch. III. Development of the Turkmen National Economy During the Prewar Five Year Plans	23
Ch. IV. The Turkmen National Economy During World War II	49
Ch. V. Postwar Economic Development of the Turkmen SSR	79
Ch. VI. Steady Rise in Living Standards and Cultural Level of the Turkmen Working Class	102
Ch. VII. Economic and Cultural Growth of the Turkmen SSR in the Sixth Five Year Plan	146
AVAILABLE: Library of Congress (HC487.T84S2)	166

Card 2/2

MM/fal  
11-5-58

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S/044/61/000/012/013/054  
C111/C333

AUTHOR: Saakyan, Art

TITLE: On a class of differential equations of first order  
which are reducible to the linear formPERIODICAL: Referativnyy zhurnal, Matematika, no. 12, 1961, 29,  
abstract 12B124. ("Uch. zap. Yerevansk. gos. ped. in-t.  
Ser. fiz.-matem.", 1960 (1961), vyp. I, 83-91)TEXT: The following theorem is proved: In order that the  
equation  $y' + P(x)\varphi(y) + Q(x)\psi(y) = 0$  can be reduced by a transforma-  
tion of the unknown function to a linear form, it is necessary and  
sufficient that the condition

$$\left[ \frac{\varphi(y)}{\psi(y)} \right]'_y = \frac{r\psi(y) + k'\varphi(y)}{[\psi(y)]^2}$$

✓

be satisfied, where r and k are constants.

Examples are also considered.

[Abstracter's note: Complete translation.]

Card 1/1

MATSOYAN, S.G.; SAAKYAN, A.A.

Cyclic polymerization and copolymerization. Part 7: Synthesis and  
cyclic polymerization of divinylketals. Vysokom. soed. 3 no.9:  
1317-1320 S '61. (MIRA 14:9)

1. Institut organicheskoy khimii AN Armyanskoy SSR.  
(Vinyl compound polymers)

MATSOYAN, S.G.; SAAKYAN, A.A.

Synthesis and cyclic polymerization of divinylmercaptals and  
divinylmercaptoles. Vysokom. soed. 3 no.11:1755 N '61. (MIRA 14:11)  
(Mercaptals and mercaptoles)

S/060/61/034/002/024/025  
A057/A129

AUTHORS: Matsoyan, S.G., Saakyan, A.A.

TITLE: Synthesis of butinediol-1,4 from chloroprene

PERIODICAL: Zhurnal Prikladnoy Khimii, v 34, no 2, 1961, 466-467

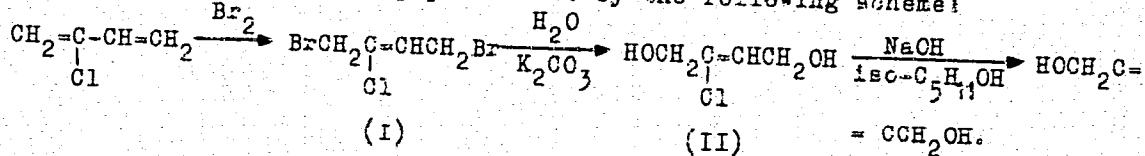
TEXT: This is a new laboratory method for the preparation of butinediol-1,4 from chloroprene by bromination, saponification and following dehydrochlorination of chloro-2-butene-2-diol-1,4. Butinediol-1,4 is important in organic syntheses. It can be prepared from acetylene and formaldehyde by the method described by Zh.I. Iotaich (Ref 1: ZhRFFKhO, 38, 252 (1906)), or W. Reppe et al. (Ref 2: Lieb. Ann., 596, 25 (1955)). The use of acetyltrimagnesiumbromide and gaseous formaldehyde in the first method is laborious, while the second method (normally used in industry) is not suitable for laboratory purposes because of the use of acetylene gas under pressure and the explosive copper acetylidy catalyst. Synthesis

Card 1/3

Synthesis of butenediol-1,4 from chloroprene

S/080/61/034/002/024/025  
A057/A129

described in the present paper occurs by the following scheme:



Bromination and saponification is accomplished in a single operation without separation of chloroprene dibromide (I). Dehydrochlorination of chloro-diol (II) occurs by heating with sodium iso-amylate (prepared from iso-amyl alcohol and sodium hydroxide). Chloro-2-butene-2-diol-1 was obtained with a 70.2% yield (corresponding to chloroprene) and had a boiling point at 117°-119°C (2.5 torr),  $n_{D}^{20}$  1.5040,  $d_{4}^{20}$  1.3213. Butenediol-1,4 was obtained with a 71.4% yield and had a boiling point at 105°-108°C (2 torr) and melting point at 55°-57°C. There are 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc.

Card 2/3

Synthesis of butinediol-1,4 from chloroprene

S/080/61/034/002/024/025  
A057/A129

ASSOCIATION: Institut organicheskoy khimii AN Armyanskoy SSR (Institute for Organic Chemistry of the AS of Armenian SSR)

SUBMITTED: March 31, 1960

Card 3/3

MATSOYAN, S.G.; MORLYAN, N.M.; SAAKYAN, Al'b.A.

Polymerization mechanism of vinylmethynylcarbinols.  
Izv.AN Arm. SSR. Khim.nauki 15 no.4:405-406 '62.

1. Institut organicheskoy khimii AN Armyanskoy SSR.  
(Methanol)  
(Polymerization)

MATSOYAN, S.G.; SAAKYAN, A.A.

Cyclic polymerization and polymerization. Report No.18:  
Synthesis and study of radical polymerization of divinyl  
mercaptals and divinyl mercaptoles. Izv.AN Arm.SSR.[him.  
nauki 15 no.5:463-472 '62. (MIRA 16:2)

1. Institut organicheskoy khimii AN Armyanskoy SSR.  
(Mercaptals) (Polymerization)  
(Radicals (Chemistry))

MATSOYAN, S.G.; POGOSYAN, G.M.; SAAKYAN, A.A.

Cyclic polymerization and copolymerization. Part 16: Synthesis and study  
of the cyclic polymerization of divinyl-(2-alkoxy)benzals. Vysokom.sod.  
5 no.9&1334-1338 S '63. (MIRA 17:1)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

MATSOYAN, S.G.; VOSKANYAN, M.G.; SAAKYAN, A.A.

Cyclic polymerization and copolymerization. Report No. 26:  
Cyclic polymerization of divinyl acetals under the effect  
of ionic catalysts. Izv. AN Arm. SSR. Khim. nauki 16 no.5:  
455-460 '63. (MIRA 17:1)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

MATSOYAN, S.G.; SAAKYAN, A.A.

Condensation of enyne and dienyne hydrocarbons with formaldehyde.  
Zhur.ob.khim. 33 no.12:3795-3798 D '63. (MIRA 17:3)

SAAKYAN, A. A.

"The relationship between the soft brown scale, Coccus Hesperidum L. (Homoptera),  
and some of its parasites."

report submitted for 12th Intl Cong of Entomology, London, 8-16 Jul 64.

AVETYAN, M.G.; DARBINIAN, E.G.; SAAKYAN, Al'b.A.; KINOYAN, F.S.; MATSOYAN, S.G.

Cyclic polymerization and copolymerization. Part 17: Radical  
polymerization of substituted divinge ketones. Vysokom. soed.  
6 no.1:3-9 Ja'64. (MIRA 17:5)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

L 44311-65 EPT(c)/EMP(j)/EWT(m)/T PC-L/Pr-L RM

S/0171/64/017/006/0676/0681

ACCESSION NR: AP5007849

24

AUTHOR: Matsoyan, S. G.; Saakyan, A. A.

23

TITLE: Research in the field of cyclic polymerization and copolymerization.  
XXXIV. The study of the polymerization of aromatic vinylethynylcarbinols

B

SOURCE: AN ArmSSR. Izvestiya. Khimicheskiye nauki, v. 17, no. 6, 1964, 676-681

TOPIC TAGS: cyclic polymerization, copolymerization

ABSTRACT: The radical polymerization of a series of secondary aromatic vinyl-ethynylcarbinols was investigated with phenyl-, 2-methylphenyl-, 3-methylphenyl-, 4-methylphenyl-, 2,4-dimethylphenyl-, 2,5-dimethylphenyl-, 2,4,6-trimethylphenyl-, 2-chlorophenyl-, and 4-chlorophenylvinylethylnylcarbinols; this was also done for tertiary carbinols with methylphenyl- and diphenylvinylethylnylcarbinols. The polymerization was conducted in the block and in solution with heating in the presence of initiating systems of a radical type: benzene peroxide, azoisobutyronitrile, air, and pure oxygen. In the research it was found that the nature and concentration of the radical initiator slightly affect the rate and depth of the polymerization of secondary aromatic vinylethynylcarbinols. It was found that aromatic

Card 1/2

L 44311-65

ACCESSION NR: AP5007849

vinylethynylcarbinols are inferior to their aliphatic analogs with respect to their capacity for polymerization while adhering to the same patterns for the polymerization mechanism. Chemical and spectroscopic investigation of the polymers which were obtained provides a basis for assuming that the radical polymerization of aromatic vinylethynylcarbinols occurs according to a cyclic mechanism previously suggested by the authors for aliphatic vinylethynylcarbinols. Orig. art. has: 3 tables, 2 figures, 1 formula.

ASSOCIATION: Institut organicheskoy khimii AN ArmSSR (Institute of Organic Chemistry, AN ArmSSR)

SUBMITTED: 29Nov63

ENCL: 00

SUB CODE: GC, OC

NO REF Sov: 007

OTHER: 000

Card 2/2 mB

MATSOYAN, S.G.; SAAKYAN, Al'b. A.

Cyclic polymerization and copolymerization. Part 35: Polymerization  
of alicyclic vinylethynylcarbinols. Izv. AN Arm.SSR. Khim.nauki 18  
no.1:60-67 '65. (MIRA 18:5)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

MATSOYAN, S.G.; MORLYAN, N.M.; SAAKYAN, A.A.

Cyclic polymerization and copolymerization. Part 36: Radical polymerization of some vinylacetylene compounds. Izv. AN Arm. SSR. Khim.nauki 18 no.1:68-75 '65.

(MIRA 18:5)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

BUSHCHIK, T.N.; SAAKYAN-BARANOVA, A.A.

Males of the soft scale *Coccus hesperidum* L. (Homoptera,  
Coccoidea). Ent. oboz. 41 no.2:334-349 '62. (MIRA 15:11)

1. Zoologicheskiy institut AN SSSR, Leningrad.  
(Scale insects)

MATSOYAN, S.G.; SAMKYAN, AL'b. A.

Synthesis of aryl vinylethynylphenols. Izv. AN Arm.SSR.  
Khim. nauki 16 no.2:159-161 '63  
(MIRA 17:8)

1. Institut organicheskoy khimii AN ArmSSR.

SAAKYAN, A.G.

Influence of gastric lavage with mineral water from Essentuki  
No. 4 on bile secretion. Vrach.delo no.12:1305-1306 D '56.  
(MIRA 12:10)

1. Bal'neologicheskiy institut na Kavkazskikh mineral'nykh  
vodakh i sanatoriy No.2 Yessentikskogo kurorta.  
(BILIARY TRACT--DISEASES) (STOMACH)  
(YESSENTUKI--MINERAL WATERS)

SAAKYAN, A.G.

Reflex effect of mineral water gastric lavage on exocrin secretion  
of the pancreas in chronic gastritis. Vop.kur.fizioter. i lech.  
fiz. kul't. 23 no.2:123-126 Mr-Ap '58. (MIRA 11:6)

1. Iz Pyatigorskogo klinicheskogo otdeleniya (zav. - prof. Ye.Ya.  
Stavskaya) Bal'neologicheskogo instituta na Kavkazskikh Mineral'-  
nykh Vodakh (dir. - dotsent I.S.Savoshchenko)  
(MINERAL WATERS) (STOMACH--DISEASES)  
(PANCREAS—SECRETION)

SAAKYAN, A.G.

Effect of radon mineral water on the isolated frog heart  
following the blocking of tissue sulfhydryl groups. Farm. i  
toks. 22 no.2:178-182 Mr-Ap '59. (MIRA 12:6)

1. Pyatigorskaya klinika (zav. - prof. Ye.Ya.Stavskaya) Gosudar-  
stvennogo bal'neologicheskogo instituta na Kavkazskikh Mineral'-  
nykh Vodakh.

(MINERAL WATER, effects,  
radon water on isolated frog heart after block  
of tissue sulfhydryl cocce cpds. (Rus))

(HEART physiol.

eff. of radon mineral water on isolated frog  
heart after block of sulfhydryl cpds. (Rus))

(SULFHYDRYL COMPOUNDS,

same)

SAAKYAN, A. G., Cand Med Sci -- (diss) "Condition of motor function of the stomach in patients suffering with chronic gastritis and its dynamics under the influence of health resort treatment in Pyatigorsk." Moscow, 1960. 18 pp; (Ministry of Public Health RSFSR, State Scientific Research Inst of Health Resort Study and Physiotherapy); 250 copies; price not given; (KL, 28-60, 166)

BLOKH, R.L., kand.med.nauk; VASIL'YEVA, N.K.; SAAKYAN, A.G.

Effect of radon waters of varying concentrations on some indices  
of neurohumoral regulation in chronic gastritis. Uch.zap.Pyat.gos.  
nauch.-issl.bal'n.inst. 3:48-58 '60. (MIRA 15:10)  
(RADON—THERAPEUTIC USE) (STOMACH—INFLAMMATION) (NEUROCHEMISTRY)

SAAKYAN, A.G., mladshiy nauchnyy sotrudnik

Some problems in the method of crenotherapy in disorders of the  
motor function of the stomach in chronic gastritis. Uch.zap.  
Pyat.gos.nauch.-issl.bal'n.inst. 3:96-106 '60. (MIRA 15:10)  
(STOMACH—INFLAMMATION) (MINERAL WATERS)

SAAKYAN, A.G.

Mechanism of the toxic action of insulin on the frog heart. Biul.  
eksp. biol. i med. 49 no. 4:75-78 Sp '60. (MIRA 13:10)

1. Iz Pyatigorskogo nauchno-issledovatel'skogo bal'neologicheskogo  
instituta na Kavkazskikh Mineral'nykh Vodakh (dir. - dotsent  
I.S. Savoshchenko).

(INSULIN) (HEART)

SAAKYAN, A. G.; LANDOGA, V. I.; KAZANCHEV, M. I.

Electrophoretic studies on blood protein fractions in Bechterev's disease. Terap. 34 no.1:56-61 '62. (MIRA 15:7)

1. Iz Pyatigorskoy kliniki (glavnnyy vrach V. M. Dukhovskoy) Gosudarstvennogo nauchno-issledovatel'skogo bal'neologicheskogo instituta na Kavkazskikh mineral'nykh vodakh (dir. - kandidat meditsinskikh nauk Ye. A. Kamenskiy)

(SPINE--DISEASES) (ELECTROPHORESIS)

SAAKYAN, A.G.; KAZANCHEV, M.I.

Effect of strophanthin-K on the activity of sulphydryl groups  
in the heart muscle. Biul. eksp. biol. i med. 53 no.5:81-84  
My '62. (MIRA 15:7)

1. Iz Pyatigorskoy kliniki (glavnnyy vrach V.M. Dukhovskoy)  
Gosudarstvennogo nauchno-issledovatel'skogo bal'neologicheskogo  
instituta na Kavkazskikh Mineral'nykh Vodakh. Predstavlena  
akademikom V.N. Chernigovskim.  
(STROPHANTHIN) (HEART-MUSCLE)  
(MERCAPTO GROUP)

SAAKYAN, A.G.; NANAZIASHVILI, I.S. [Yessen' uki]

Effect of some food products and mineral waters on the motor  
function of the small intestine in chronic colitis. Vop. pit.  
22 no.6:21-26 N-D '63. . (MIRA 17:7)

1. Iz gastroenterologicheskogo otdeleniya (zav. - kand. med. nauk  
A.G. Saakyan) Yessentukskoy klinikii i Pyatigorskogo nauchno-issle-  
dovatel'skogo instituta kurortologii i fizioterapii.

SAAKYAN, A.G.; KAZANCHEV, M.I.; KESSEL', V.P.

Ability of K-strophanthin and calcium to restore the activity  
in the frog's heart arrested by cortisone. Farm. i toks. 26  
no.2:206-210 Mr-Ap '63. (MIRA 17:8)

1. Pyatigorskaya klinika Gosudarstvennogo nauchno-issledo-  
vatel'skogo bal'neologicheskogo instituta na Kavkazskikh  
Mineral'nykh Vodakh.

SAAKYAN, A.G.

Effect of pituitrin P in toxic doses on the amplitude of  
the contractions of an isolated frog heart. Farmakol.  
toksik. 26 no.3:338-342 My-Je'63 (MIRA 17:2)

1. Pyatigorskiy nauchno-issledovatel'skiy bai'naologicheskiy  
institut na Kavkazskikh Mineral'nykh Vodakh.

DERYABINA, V.M.; SAAKYAN, A.G.

Conference on the internal use of mineral waters in diseases  
of the digestive organs and metabolism. Vop. kur., fizioter.  
i lech. fiz. kul't. 28 no.4;373-377 Jl-Ag '63.

(MIRA 17:9)

SAAKYAN, A.G.; NANAZIASHVILI, I.Z.

Rectal interoceptors and their significance in the act of defecation in chronic colitis. Terap. arkh. 35 no.1:65-70 Ja '63. (MIRA 16:9)

1. Iz gastroenterologicheskogo atdeleniya (zav. - kand.med. nauk A.G. Saakyan) Yessentukskoy kliniki (glavnnyy vrach, A.F. Starshikov) Pyatigorskogo nauchno-issledovatel'skogo instituta kurortologii i fizioterapii (dir. - kand.med.nauk Ye.A. Smirnov - Kamenskiy) —————

(COLITIS) (DEFECATION) (RECTUM—INNERVATION)

SAAKYAN, A.G.; KAZANCHEV, M.I.

Capacity of radon mineral water to restore the activity of the frog heart disturbed by the action of cortisone and ACTH. Biul. eksp. biol. i med. 56 no.9:69-72 S '63.

(MIRA 17:10)

1. Iz Pyatigorskogo nauchno-issledovatel'skogo bal'neologicheskogo instituta na Kavkazskikh Mineral'nykh Vodakh. Predstavlena deystvitel'nym chlenom AMN SSSR A.V. Lebedinskim.

SAAKYAN, A.G.; NANAZIASHVILI, I.S.; GOVENKO, G.I.

Effect of some hormone preparations on the motor activity of the stomach and small and large intestines in chronic colitis patients.  
Probl. endok. i gorm. 10 no.1:50-54 Ja-F '64.

(MIRA 17:10)

1. Gastroenterologicheskoye otdeleniye (zav. - kand. med. nauk  
A.G. Saarkyan) Yessentukskoy kliniki (glavnnyy vrach A.F. Starshikov)  
Pyatigorskogo nauchno-issledovatel'skogo instituta kurortologii i  
fizioterapii (dir. - kand. med. nauk Ye.A. Kamenskiy).

SAAKYAN, A.G.; ARUTYUNOVA, N.L.; NIKOLAYEVA, Ye.A.

Effect of the vitamins B<sub>1</sub>, B<sub>6</sub>, B<sub>12</sub> and C on the motor activity of the stomach, the small and the large intestines in patients with chronic enterocolitis and colitis. Vop. pit. 23 no.5:45-50 S-0  
'64. (MIRA 18:5)

1. Gastroenterologicheskoye o'deleniye (zav. - kand.med.nauk A.G.Saakyan) Yessentukskoy kliniki Fyatigorskogo nauchno-issledovatel'skogo instituta kurortologii i fizicheskoi terapii.

SAAKYAN, A.G.; ARUTYUNOVA, N.L.; NIKOLAYEVA, Ye.A.

Comparative study of the effect of penicillin, streptomycin and chlortetracycline on the motor activity of the gastrointestinal tract in patients with chronic infectious colitis. Antibiotiki 10 no.2:170-173 F '65. (MIRA 18:5)

1. Gastroenterologicheskoye otdeleniye Yessentukskoy kliniki (glavnnyy vrach A.F.Buchkov) Pyatigorskogo nauchno-issledovatel'skogo instituta kurortologii i fizioterapii.

SAMYAN, A.G.

Clinical significance of aspiration biopsy of the mucous membrane  
of the large intestine in chronic colitis. Sov.med. 28 no.4:30-33  
(MIRA 18:6)  
Ap '65.

I. Gastroenterologicheskaya otdeleniye (zav. - kand.med.nauk A.G.  
Saakyan) Yessentukskoy kliniki Pyatigorskogo nauchno-issledovatel's-  
kogo instituta kurortologii i fizioterapii (dir. - kand.med.nauk  
Yu.A.Kamenskiy).

AUTHORS: Akopyan, A. N., Saakyan, A. M., Avetyan, M. G. 79-28-5-19/69

TITLE: Synthesis and Investigation of the Chlorination Products of Acetylenyl Divinyl (Hexadiene - 1,3 - yne 5) (Sintez i issledovaniye produktov khlorirovaniya atsetilenildivinila) (geksadiyen-1,3-in-5)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28. Nr 5,  
pp. 1221 - 1224 (USSR)

ABSTRACT: There are no data in publications on the chlorination of acetylenyl divinyl, whereas that of divinyl acetylene was investigated in detail (Reference 5). In the chlorination process of divinyl acetylene its di-, tetra-and hexachlorine derivates form and the formation of each subsequent compound from the preceding one takes place by addition of chlorine in the position 1,4, i.e. at the endings of the conjugated enine or diene. Possibly the reason for this regularity is the symmetrical structure of divinyl acetylene. Acetylenyl divinyl differs from divinyl acetylenyl by the asymmetrical structure of the molecules, so that a different course of chlorination was to be expected. In the laboratory of the authors a higher chlori-

Card 1/3

79-28-5-19/69

Synthesis and Investigation of the Chlorination Products of Acetylenyl Divinyl  
(Hexadiene -1,3 - in 5)

nation velocity of divinylacetylene compared to that of divinyl acetylene was found. The investigation of the chlorination reaction of the latter could prove, besides further syntheses, useful also in technical fields. Different from divinyl acetylene the chlorination process of acetylenyl divinyl proceeds till to saturation, i. e. to the octachlorohexane. According to its structure the octachloride to be expected would have to have the formula 1,1,2,2,3,4,5,6 octachlorohexane =  $\text{CHCl}_2 - \text{CCl}_2 - \text{CHCl} - \text{CHCl} - \text{CHCl} - \text{CH}_2\text{Cl}$ . This way by the chlorination of acetylenyl divinyl the following compounds not described in publications were synthetized: 1,6-dichlorohexatriene - 1,2,4; 1,2,3,6 - tetrachlorohexadiene -1,4; 1,2,3,4,5,6-hexachlorohexene - 1 and 1,1,2,2,3,4,5,6 - octachlorohexane. Di - and tetrachlorine derivatives are extremely unstable liquids with a strange unpleasant smell; they soon split off hydrogen chloride and resinify. Octachlorohexane forms scaly crystals with camphor smell.

Card 2/3

79-28-5-19/69

Synthesis and Investigation of the Chlorination Products of Acetylvinyl Divinyl  
(Hexadiene -1,3-yne 5)

There are 1 table and 5 references, 3 of which are Soviet.

ASSOCIATION: Khimicheskiy institut AN Armyanskoy SSR (Chemical Institute  
of the AS Armenian SSR)

SUBMITTED: April 22, 1957

Card 3/3

87237  
S/171/60/013/004/004/004  
E142/E265

15.8102

AUTHORS: Akopyan, A. N. and Saakyan, A. M.  
TITLE: Investigations on Divinylacetylene and its Halo-  
Derivatives. Part 4: Investigations on the  
Condensation of 1,2,3,4,5,6-Hexachloro-3-hexene  
with Benzene

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR, Khimichesk-  
iyе nauki, 1960, Vol. 13, No. 4, pp. 269-274

TEXT: Alkylated aromatic monomers or low-molecular  
polymers are formed during the condensation of alkyl haloids and  
aromatic compounds; reaction conditions such as the ratio of the  
starting compounds, temperature, etc. influence the character of  
the end-products. G. S. Kolesnikov and V. V. Korshak carried  
out systematic investigations on this reaction (Refs. 3-8, 14,  
15, 17-19, 22) and N. N. Lebedev (Ref. 16) described the reaction  
kinetics, the effect of solvents, etc. The present investiga-  
tions proved that 1,2,5,6-tetraphenyl-3,4-dichloro-3-hexene was  
formed as one of the basic condensation products, under suitable  
reaction conditions. The yields depended on the ratio of the

Card 1/ 2

87237

S/171/60/013/004/004  
E142/E265

Investigations on Divinylacetylene and its Halo-Derivatives.  
Part 4: Investigations on the Condensation of 1,2,3,4,5,6-Hexachloro-3-hexene with Benzene

components, the reaction temperature and the amount of catalyst used. The compound is insoluble in alcohols, acetone and petroleum ether, very slightly soluble in chloroform and benzene; it is slightly soluble in ethylene chloride and carbon tetrachloride but has improved solubility on heating. It is converted into benzoic acid when oxidised with 15 to 20% nitric acid in an autoclave at a temperature of 200 to 220°C. The reaction is exothermic when aluminium chloride is used as a catalyst and the reaction mixture has to be cooled to 4 to 5°C. The reaction time is between 1.5 to 4 hours. Ferric chloride was unsatisfactory as it showed too weak catalytic activity. Experimental details and percentage composition of the compound are given. There are 1 table and 24 references; 23 Soviet and 1 non-Soviet.

ASSOCIATION: Institut organicheskoy khimii AN ArmSSR  
(Institute for Organic Chemistry, AS ArmSSR)

SUBMITTED: March 7, 1960

Card 2/2

AKCPYAN, A.N.; SAAKYAN, A.M.

Chemistry of divinylacetylene and its halo derivatives. Report No.5:  
Some reactions of 1,2,5,6-tetraphenyl-3,4,-dichloro-3-hexene. Izv.  
AN Arm. SSR. Khim. nauki 13 no.5:351-356 '60. (MPA 14:2)

1. Institut organicheskoy khimii AN ArmSSR.  
(Hexene)

AKOPYAN, A.N.; SAAKYAN, A.M.; SAFARYAN, A.A.

Chemistry of divinylacetylene and its halo derivatives. Part 10:  
Chlorination of trichloroethylene, perchloroethylene, and benzene  
initiated by vinylacetylene hydrocarbons. Zhur.ob.khim. 32 no.4:  
1098-1104 Ap '62. (MIRA 15:4)

1. Institut organicheskoy khimii AN Armyanskoy SSR.  
(Chlorination) (Butenyne)

AKOPYAN, A.M.; SARKYAN, R.N.; DVIGUADYAM, D.A.

Copolymerization of divinylbenzylidene and its halo derivatives. Part 17:

Chlorination of polyethoxyacetylenes, chlorobenzene, and  $\alpha$ -Bn

trichloroacetylene initiated by vinylacetylene hydrocarbons.

Zhur. obshch. khim. 35 no.3:51-52 Ja '65.

(MERA 18:2)

1. Institut organicheskoy khimii AN Artyanskoy SSR.

SARKYAN, A. S.

Sarkyan, A. S. "Restoration of upper and lower lip and mucous membrane defects at the threshold of the mouth after mine-fragmentation injury," (Report), Trudy III Zakavkazsk. s"ezda khirirvov, Yerevan, 1948 (on Cover: 1949), p. 473-479

SO: U25240, 17 Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

SAAKYAN, A.V.

Organizing equipment repair in the machinery industry in  
Armenia. Mashinostroitel' no.6:5 Je '60.  
(MIRA 13:8)  
(Armenia--Machine tools--Maintenance and repair)

SAAKYAN, A.Ye.

8(3)

PHASE I BOOK EXPLOITATION

SOV/1399

Bachelis, David Semenovich, Nikolay Ivanovich Belorussov, and Aleksandr Yeffemovich Saakyan

Elektricheskiye kabeli, provoda i shnury; spravochnik (Electric Cables, Conductors and Cords; Reference Book) Moscow, Gosenergoizdat, 1958. 480 p. 21,000 copies printed.

Ed.(Title page): Belorussov, N.I.; Ed. (Inside book): Solov'yev, P.F.; Tech. Ed.: Voronin, K.P.

PURPOSE: This book is intended for engineers and technicians of design and installation organizations, scientific research institutes and laboratories, for councils of the national economy of economic administrative regions, and for plants and factories using cables, wires and cords. It is also intended for workers in the cable industry and for students.

COVERAGE: The authors describe the various types of cables, conductors and cords manufactured in the USSR. They give the outside diameters and weights of the most frequently used types, their electrical characteristics and methods of measuring them. Data on permissible loads and recommendations for selection of various operating conditions are also given. The book includes a brief

Card 1/13

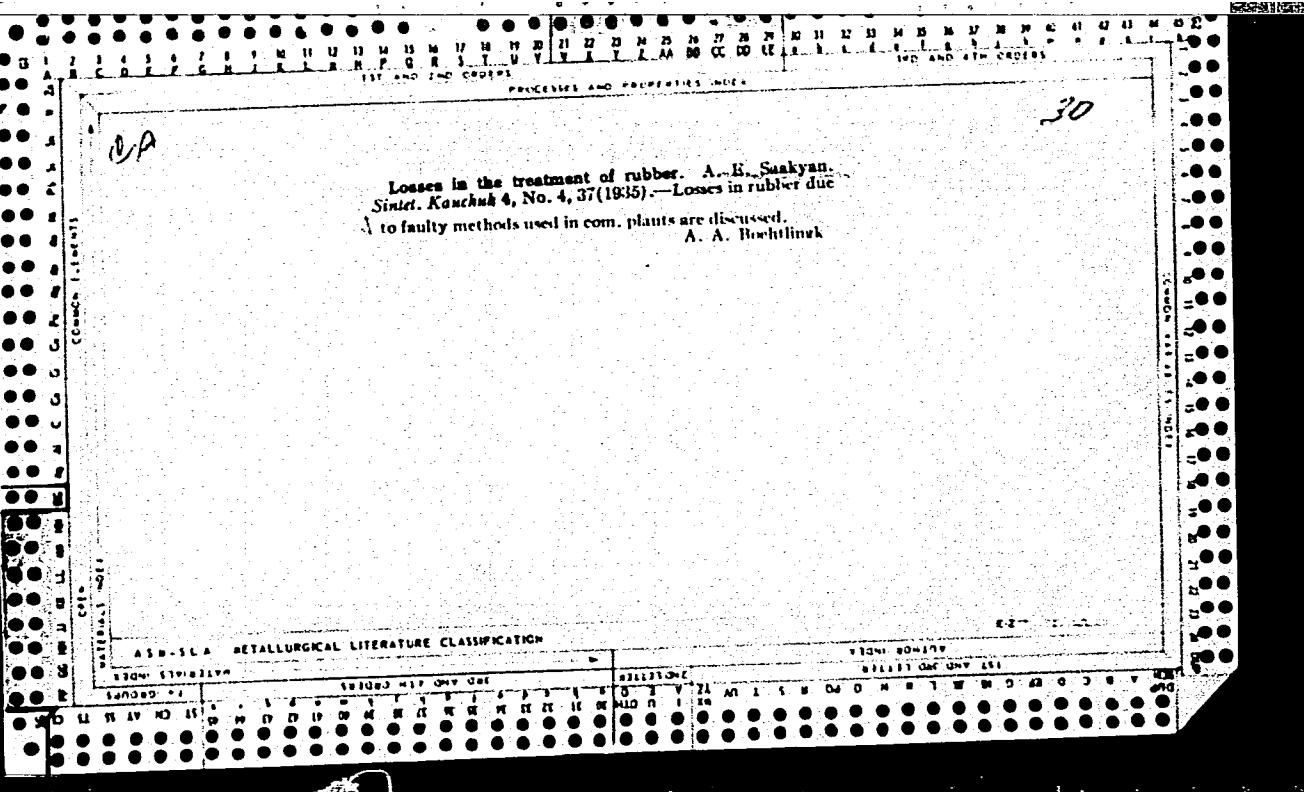
## Electric Cables (Cont.)

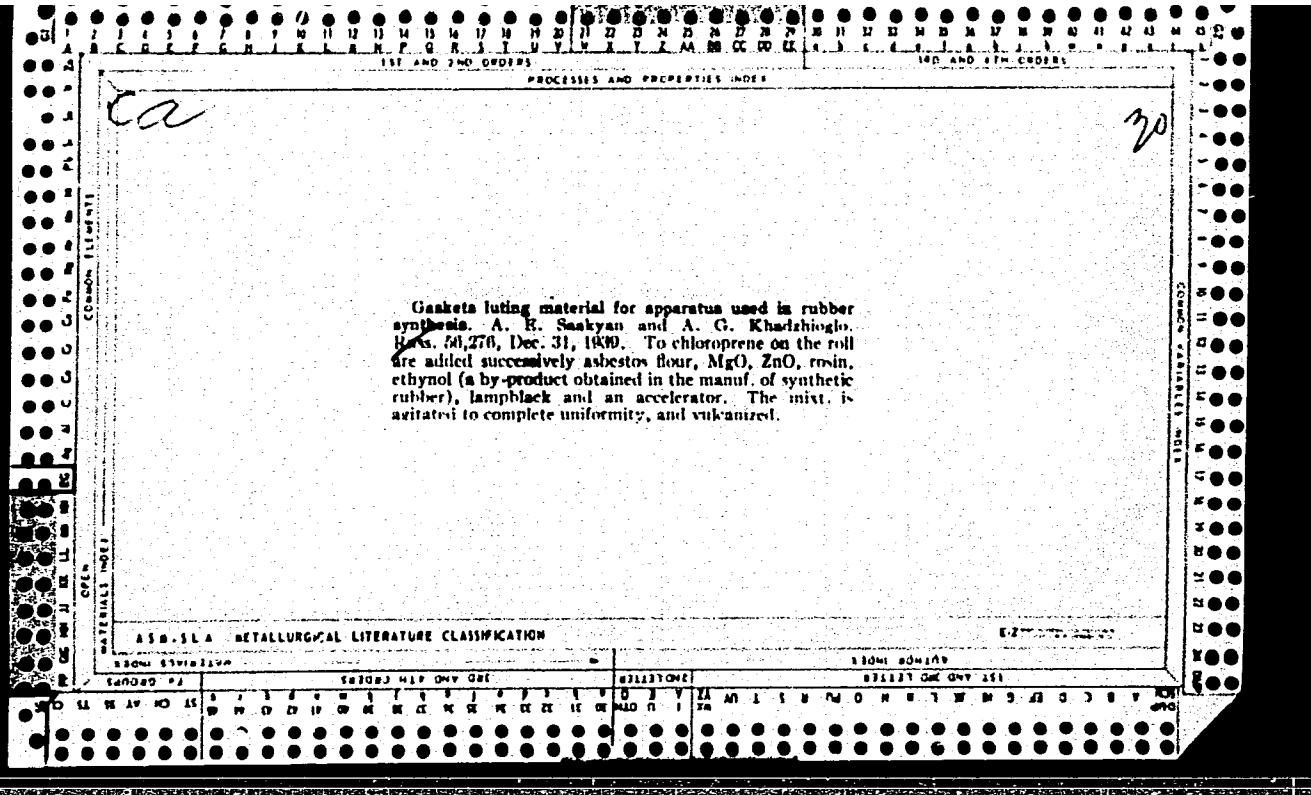
SOV/1399

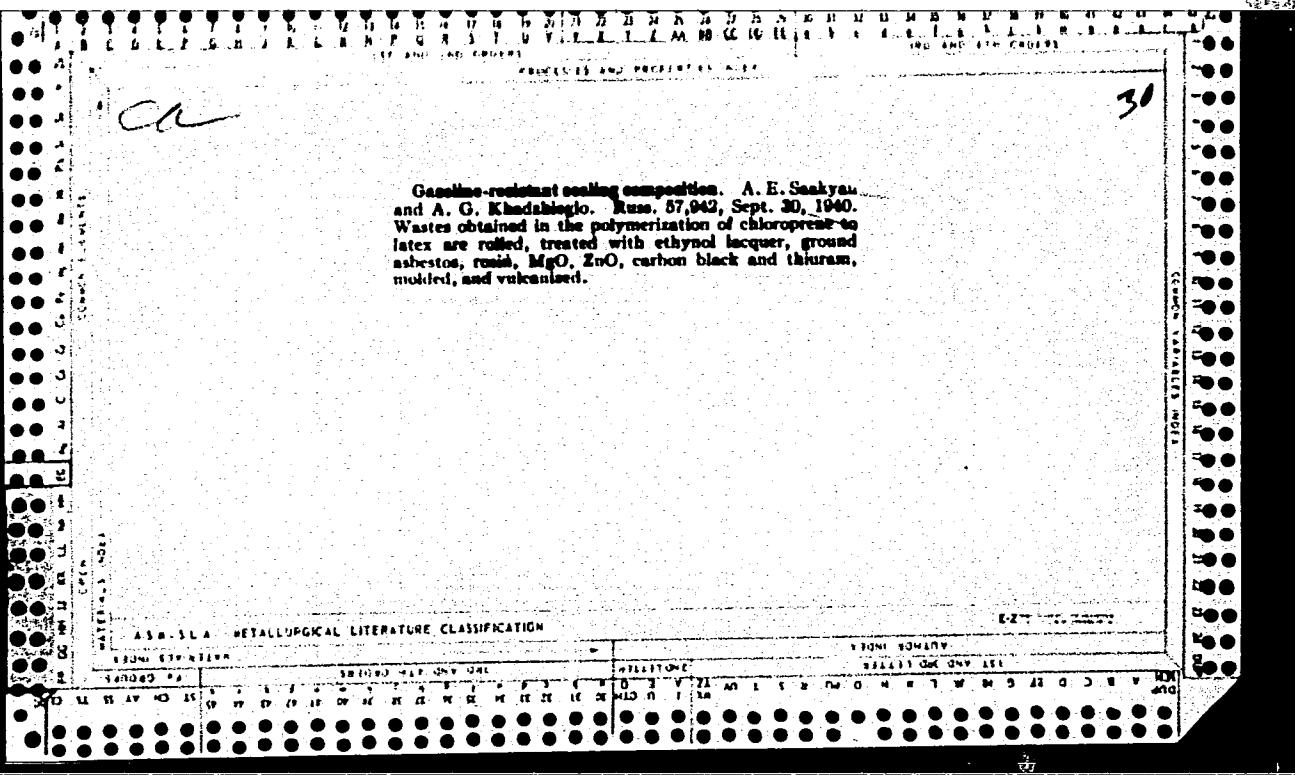
treatment of the theory and principles of design of power cables with impregnated paper insulation, r-f cables and communication cables. The appendixes provide specifications of different types of cables, conductors and cords and explain the procedure for calculating the consumption of materials in the manufacture of various cable products. Chapters 1, 5, 15, 16, 17, 18, 19, 20, 21, 23 and the appendixes were written by D.S. Bachelis. Chapters 2, 13, 14, 22, and 24 by N.I. Belorussov, and Chapters 3, 4, 6, 7, 8, 9, 10, 11, and 12 by A.Ye. Saakyan. The authors thank the following persons for their help: Doctor of Technical Sciences I.Ye. Yefimov, Candidate of Technical Sciences R.M. Lakernik, Engineer Ye.A. Proshchin and Engineer P.F. Solov'ev.

## TABLE OF CONTENTS:

Foreword	3
Ch. 1. Bare Conductors	9
1. Nomenclature	9
2. Aluminum and steel-aluminum conductors	9
3. Bronze and bronze-steel conductors	10
4. Copper conductors	11
5. Hollow conductors	12
Card 2/13	13







*Sakyan, A.E.*  
Distr: 4E2c(+) *15*

1400. Continuous vulcanization lay-out for conductors and cables. A. E. SAKYAN. Raboty Ministerstva Elektritekhn. Prom. SSSR po Mekhaniz. i Automat. Nauod. Khim. i M., 1956, 113-6; Referat Zh. Khim., 1957, No. 16, abz. 86780. This paper describes the ANV apparatus for the applying and subsequent vulcanisation of rubber covering on a conductor core to produce cables with external diameter from 15 mm to 100 mm. Dimensions and operational details are given. - 82C25T

*DM*

BELORUSSOV, N.I., inzhener; SAAKYAN, A.Ye., inzhener.

Improving the technology of producing rubber-insulated conductors and  
cables. Vest.elektrprom.27 no.2:57-64 P '56. (MIRA 9:7)

1.Glevkabel' Ministerstva elektropromyshlennosti.  
(Electric cables) (Electric insulators and insulation)

SAAKYAN, Aleksandr Yefremovich; LINKOV, A.V., redaktor; MEDVEDEV, L.Ya.,  
tekhnicheskij redaktor

[Technical control of the manufacture of cables, wires and cords  
with rubber and polyvinyl chloride insulation] Tekhnicheskii  
kontrol' proizvodstva kabelei, provodov i shnurov s rezinovoj i  
polikhlorvinilovoj izoliatsiei. Moskva, Gos. energ. izd-vo, 1957  
238 p.

(Electric conductors)

KURANOV, Ivan Vasil'yevich; SHEPELEV, Ivan Mikhaylovich; SAAKYAN, A.Ye.,  
red.; VORONIN, K.P., tekhn.red;

[Automatic and semiautomatic continuous production lines for  
rubber mixture; combined technological processes] Potochnye  
avtomaticheskie i poluavtomaticheskie linii izgotovleniya  
rezinovykh smesei; sovmeshchennye tekhnologicheskie protsessy.  
Moskva, Gos.energ.izd-vo, 1960, 87 p.

(MIRA 14:3)

(Rubber industry--Equipment and supplies)

BACHELIS, David Semenovich; BELORUSSOV, Nikolay Ivanovich; SAAKYAN,  
Aleksandr Yefremovich; ANTIK, I.V., red.; LARIONOV, G.Ye.,  
tekhn. red.

[Manual on electric cables, wires, and cords] Elektricheskie  
kabeli, provoda i shnury; spravochnik. Pod red. N.I.Belorus-  
sova. Izd.2., perer. Moskva, Gosenergoizdat, 1963. 606 p.  
(MIRA 16:7)

(Electric wires--Handbooks, manuals, etc.)  
(Electric cables--Handbooks, manuals, etc.)

BRONSSTEYN, I.I., red.; SAAKYAN, A.Ye., red.; GLUPUSHKIN, P.M.,  
red.; SHCHERBAKOV, D.P., red.; GORSHKOV, P.N., red.;  
NEROSLAVSKIY, L.M., red.

[Improvement of the manufacture of wires and cables with  
rubber insulation; materials] Usovershenstvovanie proiz-  
vodstva provodov i kablei s rezinovoi izoliatsiei; sbor-  
nik materialov. Moskva, Energiia, 1964. 263 p.

(MIRA 18:8)

1. Otraslevoye nauchno-tehnicheskoye soveshchaniye po  
voprosam usovershenstvovaniya proizvodstva provodov i ka-  
bley s rezinovoy izolyatsiyey. 11th, Perebory Rybinskiye,  
1963. 2. Nauchno-issledovatel'skiy institut kabel'noy pro-  
myshlennosti, Moscow. (Editor: V.P. Bronshteyn).

SAAKYAN, D., kand.tekhn.nauk

Higher qualifications of specialists are a prerequisite of the  
technical progress. Prom.Arm. 5 no.5:50-51 My '62. (MIRA 15:7)  
(Armenia—Technical education)

KAZARYAN, G.A., mladshiy nauchnyy sotrudnik; SAAKYAN, D.G.

Effect of hypothermia on the course of acute radiation sickness. Vop. radiobiol. [AN Arm. SSR] 1:181-186 '60.

(MIRA 15:3)

1. Iz Sektora radiobiologii AN Armyanskoy SSR.  
(RADIATION SICKNESS)  
(HYPOTHERMIA)

PAREYSHVILLI, Ye.A., starshiy nauchnyy sotrudnik; FULATOVA, E.Ye., kand.med.nauk; KHEYFETS, Yu.B., mladshiy nauchnyy sotrudnik; BATIKYAN, I.G., mladshiy nauchnyy sotrudnik; SAAKYAN, D.G., starshiy laborant

Changes in some metabolic processes of the blood cells and hemopoietic organs following whole-body X-ray irradiation.  
Vop. radiobiol. AN ARM. SSR 2:63-74 '61.

Changes in the blood and hemopoietic organs shortly after castration and following whole-body X-ray irradiation. Ibid.:75-88  
(MIRA 18:4)

SAAKYAN, D. N., Cand of Tech Sci -- (diss) "Working out of the method of selecting building systems of field aggregates on the basis technical indicies." Moscow, 1957, 18 pp (Joint Scientific Council of the All-Union Scientific Research Institute of the Mechanization of Agriculture, and the All-Union ScientificResearch Institute of the Electrification of Agriculture) 150 copies (KL, 30-57, 111)

SAAKYAN, D. N.

SAAKYAN, D.N.

Technical and operational reasons for selecting agricultural  
machinery. Izv.AN Arm.SSR.Ser.tekh.nauk 10 no.2:63-71 '57.  
(MIRA 10:10)

(Agricultural machinery)

SAAKYAN, D.N.

Establish unified scientific and technical letter symbols  
for values. Standartizatsiia 28 no.1:32-35 Ja '64.  
(MIRA 17:1)

PULATOVA, E.Ye., kand.med.nauk; KHEYFETS, Yu.B., mladshiy nauchnyy sotrudnik;  
SAAKYAN, Dzh.G., starshiy laborant

Phagocytosis and change in the glycogen content of blood cells and  
hemopoietic organs in irradiated animals. Vop. radiobiol. AN ARM.  
SSR 2:113-120 '61. (MIRA 18:4)

AUTHOR: Saakyan, E.A.

SOV/121-58-8-7/29

TITLE: Peculiarities of the Operation of Transmissions with Electro-Magnetic Clutches under Conditions of Short Period Repetitions (Osobennosti raboty privodov s elektromagnitnymi myatami v povtorno-kratkovremennom rezhime)

PERIODICAL: Stanki i Instrument, 1958, Nr 8, pp 20-23 (USSR)

ABSTRACT: Experiments with electro-magnetic clutches are reported, concerned with the determination of the permissible frequencies of engagement and slipping velocities under the conditions of oil cooling. Sizes 2 and 4 clutches in the EM series developed by ENIMS were tested, namely EM22 with a nominal torque of 4.0 kgm (without slip), EMR-4 developing 8 kgm, and EMR-4A, developing 12 kgm (EM-22 can hold 2.5 kgm when slipping). Clutch EM22 is installed in the automatic soil cultivator developed by the Georgian Scientific Research Institute for the Mechanisation and Electrification of Agriculture (Gruzinskii Nauchno-Issledovatel'skiy Institut Mekhanizatsii i Elektrifikatsii Sel'skogo Khozyaystva).

Card 1/3

SOV/121-58-8-7/29

Peculiarities of the Operation of Transmissions with Electro-Magnetic Clutches under Conditions of Short Period Repetitions

clutches EMR-4 and EMR-4A are installed in the apron of the engine lathe, model 163 in batch production by the Tbilisi Machine Tool Works (Tbilisskiy Stankostroitel'-nyy Zavod) "Imeni Kirov". Fig 2 shows the diagrammatic test set-up. The clutch input shaft is driven at controlled speed by a Ward-Leonard set. A traction type automatically recording dynamometer TTD-1 serves as a load driven through a gear reduction with a ratio of 1.5. The dynamometer records the torque at different slip velocities, engagement frequencies, and conditions of lubrication. Fig 3 shows that a rapid rise in torque takes place during 50-100 milliseconds, followed by a gradual rise. The torque step during the rapid rise is a function of speed. A typical plot in Fig 4 shows a minimum at about 1000 rpm. The intervals between engagements affect the torque step. When the engagement period is below about 30% of the total cycle, the previous engagement does not affect the subsequent engagement, and the steady state value of the torque is much lower than

Card 2/3

SOV/121-58-8-7/29  
Peculiarities of the Operation of Transmissions with Electro-Magnetic Clutches under Conditions of Short Period Repetitions

the nominal. Reducing the intervals until the engagement time reaches 60% of the total cycle causes the steady state torque to rise progressively. The nominal slipping torque is reached when the engagement time amounts to 60% of the cycle. In testing EMR-4 clutches, the time during which the clutch torque rose to the idling torque of the lathe feed mechanism was measured. Certain discrepancies in this measurement depending on the rate of engagement are described and explained by the behaviour of the oil film, showing once again the effect of the interval between engagements.

There are 8 figures, 1 Table and 3 references (Soviet)

Card 3/3

SAAKYAN, E.A., inzh.

Performance of electromagnetic friction clutches of electric  
"dekavainer" machines for vineyards. Nauch. trudy VIESKH 7:  
49-60 '60. (MIRA 15:8)  
(Agricultural machinery) (Viticulture)

IMEDADZE, V.V.; SAAKYAN, E.A.; CHAKHIROV, N.S.; FILIMONOV, V.N.

Correlation recorder using transistor and ferrite cells. Trudy  
Inst. elek., avtom. i telem. AN Gruz. SSR 3:35-46 '62. (MIRA 16:5)  
(Information theory)

IMEDADZE, V.V.; SAAKYAN, E.A.; CHAKHIROV, N.S.

Statistical methods for determining the dynamic characteristics  
of industrial objects. Trudy Inst. elek., avtom. i telem. AN  
'4:67-74 '63. (MIRA 17:5)

L 00470-66

ACCESSION NR: AT5014331

UR/0000/64/000/000/0071/0084

19

B41

AUTHOR: Imedadze, V. V.; Saakyan, E. A.; Melikhova, Ye. V.

TITLE: Determination of the dynamic characteristics using a discrete correlation computer

SOURCE: AN GruzSSR. Institut elektroniki, avtomatikii telemekhaniki. Elementy vychislitel'noy tekhniki i mashinnyy perevod (Elements of computer technology and machine translation). Tiflis, Izd-vo Metsniyereba, 1964, 71-84

TOPIC TAGS: correlation function, data processing system, data correlation

ABSTRACT: The article discusses the various computer methods of determining the correlation function by means of a convolution-type integral of the form

$$R_{yx}(\epsilon) = \int_0^{\infty} R_{xx}(\epsilon - \sigma) k(\sigma) d\sigma,$$

where  $R_{yx}$  is the mutual correlation function,  $R_{xx}$  the autocorrelation function, and  $K(\sigma)$  the impulse transfer function of the system. It is shown that the combined use of the Fourier transformation and of a special computer (discrete correlograph) offers many advantages over other methods. The correlograph itself was developed at the Institut elektroniki, avtomatiki i telemekhaniki (Institute of

Card 1/2

L 00470-56

ACCESSION NR: AT5014331

Electronics, Automation, and Telemechanics) AN GruzSSR and was described elsewhere by two of the authors (Imedadze and Saakyan, with N. S. Chakhirov, Diskretnyy korrelograf [Discrete Correlograph], Izdaniye TsITEIN, No. 22, Moscow, 1961). The processing of the primary information for the determination of the impulse transfer function with this correlograph consists of three stages. The first involves the determination of the correlation functions from the primary information. The second consists of calculating the spectral densities, the real frequency characteristic, and the imaginary frequency characteristic of the system. The third stage consists of finding the transfer function itself. The mathematics and the required computer programming are described in some detail, and some illustrative examples pertaining to the control of a blast furnace are included. The calculation results were in satisfactory agreement with the actual data. Orig. art. has: 13 figures and 16 formulas.

ASSOCIATION: none

SUBMITTED: 14 Aug 64

ENCL: 00

SUB CODE: DP

NR REF Sov: 006

OTHER: 000

*mcr*  
Card 2/2

L 01038-67 EWT(d)/T IJP(c) GD

ACC NR: AT6015125 (A) SOURCE CODE: UR/0000/65/000/000/0034/0039

37

AUTHOR: Imedadze, V. V.; Saakyan, E. A.; Melikhova, Ye. V.

33

BT/

ORG: none

TITLE: Some problems in evaluation of accuracy of correlation functions 16SOURCE: AN GruzSSR. Institut elektroniki, avtomatiki i telemekhaniki. Skhemy  
avtomaticheskogo upravleniya (Automatic control circuits). Tiflis, Izd-vo  
Metsniyereba, 1965, 34-39

TOPIC TAGS: correlation function, correlation statistics

ABSTRACT: Further improvement in the methods of calculating correlation functions, with the source information in discrete form, should go along these two directions: (1) Development of methods for evaluating the error depending on the number of points of source information; with knowledge of the process frequency spectrum available, the highest-frequency region should contain 10-40 points; (2) With a sufficiently large number of source-information points, the accuracy of calculation of correlation function should be determined. The present article places particular emphasis on the

Card 1/2

L 01038-67

ACC NR: AT6015125

4

case of a relatively small number of the source-information points. A formula for the centered autocorrelation function indicates two sources of errors: (a) level quantization and (b) determination of mathematical expectation. If the quantization interval is  $q = 1/31$ , maximum level, the quantization error is negligible. For practical purposes, it is recommended that estimation of the mathematical expectation be restricted to the second decimal place. With the above provisions, the correlation functions of interdependent parameters (30–70 points) of the rolling process at the Pervouralsk Pipe Plant were estimated on a DK-1<sup>1/2</sup> digital correlograph developed by the Institute of Electronics, Automatics and Telemechanics, AN GruzSSR. Orig. art. has: 35 formulas.

SUB CODE: 12, 09 / SUBM DATE: 29Sep65 / ORIG REF: 005

awm

Card 2/2

L 42011-65 EWT(d)/EPF(n)-2/EWP(v)/EWP(k)/EWP(h)/EWP(l) Po-4/Pq-4/Pf-4/Pg-4/  
 Pa-2/Pu-4/Pk-4/P1-4 IJP(c) WW/GS/BC UR/0000/65/000/000/0127/0135 48  
 ACCESSION NR: AT5009733 B7/

AUTHOR: Imedadze, V.V.; Saakyan, E.A.

TITLE: Calculation of the dynamic characteristics of objects under control using a discrete correlograph

SOURCE: Analiticheskiye samonastraivayushchiyesya sistemy avtomaticheskogo upravleniya (Analytical adaptive control systems), Moscow, Izd-vo Mashinostroyeniye, 1965, 127-135

TOPIC TAGS: correlograph, dynamic characteristic calculation, autocorrelation calculation, mutual correlation calculation, transfer function calculation, Fourier transform application

ABSTRACT: Recently, statistical methods have been developed for the determination of the dynamic characteristics of controlled objects (see, e.g., V. V. Solodovnikov, A.S. Uskov, Statisticheskiy analiz ob'yektov regulirovaniya, Mashgiz, 1960) enabling one to calculate the necessary characteristics of the system from the records of the input and output quantities collected during normal operation. These methods are usually either based on or lead to the solution of the integral

$$R_{\nu x}(\tau) = \int_0^{\sigma} k_{vv}(\tau - \theta) k(\theta) d\theta. \quad (1)$$

Card 1/2

L 42011-65

ACCESSION NR: AT5009733

where  $R_{yy}(\tau)$  is the autocorrelation input function,  $R_{yx}(\tau)$  is the mutual correlation function between the input and output of the system, and  $k(\theta)$  is the pulsed transfer function. This equation can be solved by means of Fourier transforms (V. V. Solodovnikov, A.S. Uskov, Avtomatika i telemekhanika, 1959, no. 12), and the necessary calculative manipulations can be carried out on the discrete correlograph described in this paper. It is essentially a specialized computer which first determines the correlation function, then calculates the spectral densities and real frequency characteristics of the object, and finally, using the correlation functions and the previously prepared cosine function programs, calculates the pulsed transfer function. Calculations show that 20 calculated points should be sufficient in the case of most industrial objects. The correlograph consists of input, computation, and output parts, and its block diagram and detailed operating descriptions are given. Autocorrelation, mutual correlation, spectral density, and weight functions are given for the example of a boiler whose input represents the gas consumption, and the output - the vapor production of the boiler. Orig. art. has: 9 formulas and 11 figures.

ASSOCIATION: none

SUBMITTED: 15Dec84

ENCL: 00 SUB CODE: IE, DP

NO REF SOV: 007

OTHER: 001

Card 2/2 Ce

SAAKYAN, E.S.

Determining natural vibration frequencies of a circular vibratory-feed bunker. Teor. mash. i mekh. no. 98/99:78-85 '64. (MIRA 17:9)

SAAKYAN, G.A.

Results of tomato crossing as related to pollination of the  
blossoms during different phases of their development. Izv.  
AN Arm. SSR Biol. nauki 17 no.9:75-78 S '64 (MIRA 18:1)

1. Institut zemledeliya Armyanskoy SSR.

SAAKYAN, G.D.

Role of tectonics in the regionalization of cities located in  
mountain areas as revealed by an engineering geology study  
made in Leninakan. Izv. AN Arm. SSR. Nauki o zem. 17 no.5:39-  
44 '64. (MIRA 17:10)

1. Upravleniye geologii i okhrany nedr pri Sovete Ministrov  
Armyanskoy SSR.

SAAKYAN, G. N.

7714. SAAKYAN, G. N. - Material' nya zainteresovanost'--stimul  
razvitiya sel'skogo khozyaystva. yerevan, aypetrat, 1954.  
64s. 20sm. 5.000 ekz. 65 K.-- Na Arm. yaz. (55-3248)  
338.1 (47)

SO: Knizhnaya Letopis'. Vol. 7, 1955

SAAKYAN, G.R.

SIDOROV, Konstantin Vasil'yevich; KOZYREVA, Maria Nikolayevna; MACHERET,  
Lev Il'ich; LAKERNIK, Rafail Moiseyevich; PASHCHENKO, Valentin  
Yevgen'yevich; SAAKYAN, Gabrivel' Rafailovich; KUZNETSOV, P.V.,  
redaktor; LARIONOV, G.Ie., tekhnicheskiy redaktor.

[Economy of materials and power in the "Moskabel" plant; collection  
of articles] Ekonomiya materialov i elektroenergii na zavode "Moskabel";  
sbornik statei; Moskva, Gos. energ. izd-vo, 1954. 86 p.  
(Electric cables) (MIRA 8:4)

SAAKYAN, G. S.

Cand. Physicomath Sci.

Dissertation: "Calculation of the Nucleus Size in Retarded Radiation and Formation of Pairs."

27/2/50

Physical Inst. imeni.

P. N. Lebedev, Acad. Sci. USSR

SO Vecheryaya Moskva  
Sum 71

USSR/Nuclear Physics - Nucleus' Size of  
Radiation Loss Sep 50  
"Influence of the Nucleus' Dimensions Upon Radiation  
Loss," G. S. Saaikyan, Phys Inst imeni Lebedev, Acad  
Sci USSR.

"Zhur Eksper i Teoret Fiz" Vol XX, No 9, pp 787-794  
Differential transverse cross section of scattering  
of electrons with energy  $E_0$  greater than  $125A^{1/3}$   
MeV (A nuclear size number) decreases under large  
angles when nuclear size is taken into account. In  
limiting case when  $E_0$  is much greater than  $125A^{1/3}$   
MeV, decrease is Z times. Therefore,

168r68

USSR/Nuclear Physics - Nucleus' Size of  
(Contd) Sep 50

electrons' cross section for large angles, (90°) can  
serve as means to determine radius of nuclei and  
charge distribution in them. Submitted 4 Mar 50.

168r68

SAAKYAN, G. S.

TA 105170

## USSR/Nuclear Physics - Scattering, Oct 50

Electron

Neutron

Meson

"Influence of Nucleon Dissociation on Elastic Scattering of Electrons," G. S. Saaikyan, Phys Inst imeni Lebedev, Acad. Sci USSR

"Zhur-Eksperi Teoret Fiz" Vol XX, No 10,  
pp 871-876

Thanks to phenomenon of virtual decay of nucleon to meson ( $P \rightarrow N + \mu^+$ ,  $N \rightarrow P + \mu^-$ ),

169T70

## USSR/Nuclear Physics - Scattering, (Contd) Oct 50

differential transverse cross section of elastic scattering of electrons with energy  $E_0$  greater than 100 mev decreases for large angles. Maximum decrease is about 40%. Measurement of this effect gives valuable information about meson field around proton (mass, magnetic moment, and effective radius of meson "cloud" around nucleon). To investigate this effect the necessary refinement in Mott's formula is studied, along with the energy of transmitted nucleon. Submitted 4 Mar 50.

169T70